EU was asked to investigate monitoring data from ships and relate to burns and dispersant episodes to see if there is a correlation: i.e., are emissions from in-situ burns and dispersant spray events reflected in air monitoring data (as total VOCs)?

## Data assembled:

- Available data from in-situ burns including date, start times, durations, and locations.
- Monitoring data from each of 15 ships, with times, but no locations. Three ships were dropped from the data because they reported no data on days that burns occurred.
- Requests have been made for location data from the ships. So far no positive responses have been receivied.
- Based on the chance that a correlation might be evident, all available burn times (comprising 10 burns over a period of about a week) have been plotted with the monitoring data on a time line. See attached graphs for each ship. Note: OSHA PEL (10 ppm) has been included as a blue range in the graphs.

## Conclusion:

Some correlation between burns and spikes of VOCs is apparent, but there are many instances of VOCs not related to burns. Therefore, no clear correlation can be reported.

## Other relevant information:

- In reviewing various data and reports, EU has learned that two of the monitoring ships for which VOC data has been reported, DD2 and DD3 are actually the relief wells. It seems likely that we can get there locations and then compare at least two of the fifteen data sets to the burns.
- Monitoring from several ships indicated the presence of a large peak of VOCs on June 3<sup>rd</sup>. Some effort might be made to understand what events in the operations area caused this.

## Recommendation:

- Aquire locations of "Ships" DD2 and DD3 and have START plot locations of burns, monitoring ships and then review correlations.
- Continue to pursue data for other monitoring ships, with help from command if necessary.